

Amendments to the Claims:

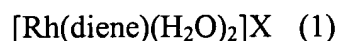
This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Please amend the claims as follows:

1-20 (Cancelled)

21. (New) Diene-bis-aquo-rhodium(I) complex of the formula:



where diene is a cyclic diene and X is a noncoordinating anion.

22. (New) The diene-bis-aquo-rhodium(I) complex according to Claim 21, wherein diene is 1,5-cyclooctadiene (COD) or norbornadiene (NBD).

23. (New) The diene-bis-aquo-rhodium(I) complex according to Claim 21, wherein X is a noncoordinating anion selected from the group consisting of BF_4^- and CF_3SO_3^- .

24. (New) The diene-bis-aquo-rhodium(I) complex according to Claim 22, wherein X is a noncoordinating anion selected from the group consisting of BF_4^- and CF_3SO_3^- .

25. (New) The diene-bis-aquo-rhodium(I) complex according to Claim 21 having the name 1,5-cyclooctadienebisaquorhodium(I) tetrafluoroborate.

26. (New) The diene-bis-aquo-rhodium(I) complex according to Claim 22 having the name 1,5-cyclooctadienebisaquorhodium(I) tetrafluoroborate.

27. (New) Diene-bis-aquo-rhodium(I) complex according to Claim 21 having the name 1,5-cyclooctadienebisaquorhodium(I) trifluoromethylsulphonate.

28. (New) Diene-bis-aquo-rhodium(I) complex according to Claim 22 having the name 1,5-cyclooctadienebisaquorhodium(I) trifluoromethylsulphonate.

29. (New) The diene-bis-aquo-rhodium(I) complex according to Claim 21, wherein the complex is in the form of a solid.

30. (New) Process for preparing a diene-bis-aquo-rhodium(I) complex according to Claim 21, which comprises reacting a rhodium(I)-olefin compound with a silver salt in an aqueous solvent mixture as a reaction mixture, wherein the silver salt is prepared in solution and is added to the reaction mixture.

31. (New) The process for preparing a diene-bis-aquo-rhodium(I) complex according to Claim 30, wherein the silver salt is prepared in solution by reacting silver oxide (Ag_2O) with the acid corresponding to the noncoordinating anion of the diene-bis-aquo-rhodium(I) complex.

32. (New) The process for preparing a diene-bis-aquo-rhodium(I) complex according to Claim 30, wherein the acid is used in an excess of up to 0.5 molar equivalents over the silver oxide.

33. (New) The process for preparing a diene-bis-aquo-rhodium(I) complex according to Claim 30, wherein the preparation of the silver salt is carried out in an aqueous medium.

34. (New) The process for preparing a diene-bis-aquo-rhodium(I) complex according to Claim 31, wherein the preparation of the silver salt is carried out in an aqueous medium.

35. (New) The process for preparing a diene-bis-aquo-rhodium(I) complex according to Claim 30, wherein the rhodium(I)-olefin compound is $[\text{Rh}(\text{COD})\text{C1}]_2$.

36. (New) The process for preparing a diene-bis-aquo-rhodium(I) complex according to Claim 30, wherein the aqueous solvent mixture comprises water together with up to 10% by volume of at least one alcoholic solvent.

37. (New) The process for preparing a diene-bis-aquo-rhodium(I) complex according to Claim 31, wherein the aqueous solvent mixture comprises water together with up to 10% by volume of at least one alcoholic solvent.

38. (New) The process for preparing a diene-bis-aquo-rhodium(I) complex according to Claim 36, wherein the alcoholic solvent is selected from methanol, ethanol, n-propanol, isopropanol, n-butanol and tert-butanol.

39. (New) In a catalytic reaction, the improvement comprising carrying out said reaction in the presence of diene-bis-aquo-rhodium(I) complex according to Claim 21.

40. (New) In a method for preparing a heterogeneous catalyst, the improvement comprising carrying out said method with presence of a diene-bis-aquo-rhodium(I) complex according to Claim 21.

41. (New) In a method for preparing a chirally nonselective, diastereoselective or enantioselective catalytically active species comprising carrying out said method in the presence of a diene-bis-aquo-rhodium(I) complex according to Claim 21.

42. (New) The method according to Claim 41, wherein the diene-bis-aquo-rhodium(I) complex is reacted with achiral and/or chiral ligands with ligand exchange.

43. (New) The method according to Claim 42, wherein the achiral and/or chiral ligands are selected from the group consisting of triphenylphosphine, ferrocenylphosphine, alkylphosphine and chiral phosphine.

44. (New) A chirally nonselective, diastereoselective or enantioselective catalytically active species, obtainable by reacting a diene-bis-aquo-rhodium(I) complex according to Claim 21 with achiral and/or chiral ligands with ligand exchange.

45. (New) The chirally nonselective, diastereoselective or enantioselective catalytically active species according to Claim 44, wherein the achiral and/or chiral ligands are selected from the group consisting of triphenylphosphine, ferrocenylphosphine, alkylphosphine and chiral phosphine.